



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0071; Directorate Identifier 2012-NE-05-AD]

RIN 2120-AA64

Airworthiness Directives; Pratt & Whitney Canada, Auxiliary Power Units

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain serial numbers of Pratt & Whitney Canada (P&WC) PW901A auxiliary power units (APUs) approved under Technical Standard Order TSO-C77A and installed on, but not limited to, Boeing 747-400 series airplanes. This proposed AD was prompted by several events of high-pressure turbine blade fracture leading to separation of the rear gas generator case and release of high energy debris. This proposed AD would require modifications of the rear gas generator case, exhaust duct support, and turbine exhaust duct flanges. We are proposing this AD to prevent separation of the rear gas generator case and release of high energy debris, which could result in injury and damage to the airplane.

DATES: We must receive comments on this proposed AD by [insert date 60 days after date of publication in the FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- Fax: 202-493-2251.

For service information identified in this proposed AD, contact Pratt & Whitney Canada Corp., 1000 Marie-Victorin, Longueuil, Quebec, Canada J4G 1A1; phone: 450-677-9411. You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (phone: 800-647-5527) is the same as the Mail address provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Mazdak Hobbi, Aerospace Engineer, New York Aircraft Certification Office, FAA, Engine & Propeller Directorate, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7330; fax: 516-794-5531; e-mail: mazdak.hobbi@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2012-0071; Directorate Identifier 2012-NE-05-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of the Web site, anyone can find and read the comments in any of our dockets, including, if provided, the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78).

Discussion

Transport Canada, which is the aviation authority for Canada, has issued Canada AD CF-2011-40, dated October 26, 2011 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

The PW901A Auxiliary Power Units have experienced several events of High Pressure Turbine (HPT) blade fracture, some of which have resulted in the separation of the rear gas generator

case, exhaust duct support, the turbine exhaust duct flanges and the release of high energy debris. Subsequent investigation revealed the turbine exhaust duct can separate under excessive load conditions resulting from extreme engine distress such as HPT blade fractures.

You may obtain further information by examining the MCAI in the AD docket.

Relevant Service Information

P&WC has issued Service Bulletin No. A16255R2, dated March 1, 2011. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of This Proposed AD

These APUs have been approved by Canada, and are approved for operation in the United States. Pursuant to our bilateral agreement with Canada, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information provided by Canada, and determined the unsafe condition exists and is likely to exist or develop on other APUs of the same type design. This proposed AD would require modification of the APU rear gas generator case, exhaust duct support, and turbine exhaust duct flanges.

Costs of Compliance

Based on the service information, we estimate that this proposed AD would affect about 135 APUs installed on airplanes of U.S. registry. The average labor rate is \$85 per work-hour. Required parts would cost about \$39,899 per APU. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$5,386,365.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and

3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Pratt & Whitney Canada: Docket No. FAA-2012-0071; Directorate Identifier 2012-NE-05-AD.

(a) Comments Due Date

We must receive comments by [insert date 60 days after date of publication in the FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Pratt & Whitney Canada (P&WC) PW901A auxiliary power units (APUs) approved under Technical Standard Order TSO-C77A and installed on, but not limited to, Boeing 747-400 series airplanes. The affected APU serial numbers are PCE 900001 through PCE 900776 inclusive.

(d) Reason

This AD was prompted by several events of high-pressure turbine blade fracture leading to separation of the rear gas generator case and release of high energy debris. We are issuing this AD to prevent separation of the rear gas generator case and release of high energy debris, which could result in injury and damage to the airplane.

(e) Actions and Compliance

Unless already done, do the following actions.

(1) Within 42 months after the effective date of this AD or the first time any maintenance is done other than preventative maintenance, whichever occurs first, modify the rear gas generator case, exhaust duct support, and turbine exhaust duct flanges.

(2) Use paragraphs 3.A. through 3.B(3)(f) of Accomplishment Instructions, and paragraph 4.A. of Appendix, of P&WC Service Bulletin (SB) No. A16255R2, dated March 1, 2011, to do the modifications.

(f) Credit for Previous Action

APUs modified previously using P&WC SB No. A16255R1, dated September 12, 2008, or P&WC SB No. A16255, dated December 12, 2007, meet the modification requirements of this AD.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, New York Aircraft Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(h) Related Information

(1) For more information about this AD, contact Mazdak Hobbi, Aerospace Engineer, New York Aircraft Certification Office, FAA, Engine & Propeller Directorate, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7330; fax: 516-794-5531; e-mail: mazdak.hobbi@faa.gov.

(2) Refer to Transport Canada AD CF-2011-40, dated October 26, 2011, and P&WC SB No. A16255R2, dated March 1, 2011, for related information.

(3) For service information identified in this AD, contact Pratt & Whitney Canada Corp., 1000 Marie-Victorin, Longueuil, Quebec, Canada J4G 1A1; phone: 450-677-9411. You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on February 17, 2012.

Peter A. White,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

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